

Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (Currently Amended) A method for networking a central controller with a first group of one or more remote devices operating in accordance with a first protocol and a second group of one or more remote devices operating in accordance with a second protocol, comprising:

assigning one or more time slots on the same upstream channel during which said first group and second group of remote devices may transmit information to said central controller;

identifying transmissions from said first group and said second group of remote devices based on said time slot assignments;

routing transmissions from said first group of remote devices to a first processor operating in accordance with said first protocol within said central controller; and

routing transmissions from said second group of remote devices to a second processor operating in accordance with said second protocol within said central controller.

2. (Currently Amended) The method of claim 1 further comprising embedding a first identifier in transmissions from said first group of remote devices and embedding a second identifier in transmissions from said second group of remote devices, wherein transmissions from said first and second groups of remote devices are identified in accordance with said first and second identifiers.

3. (Currently Amended) The method of claim 2 wherein said transmissions from said first and second groups of remote devices comprise bandwidth requests transmitted in a request contention area.

4. (Currently Amended) The method of claim 3 further comprising transmitting bandwidth grants to said first and second groups of remote devices in response to requests for bandwidth.

5. (Canceled)

6. (Original) The method of claim 1 further comprising creating a first multicast group comprising said first group of remote devices, creating a second multicast group comprising said second group of remote devices and transmitting group messages from said central controller to said first group and second group of remote devices in accordance with said first and second multicast groups.

7. (Currently Amended) The method of claim 1 further comprising receiving communications addressed for said first group and second group of remote devices ~~in accordance with addresses of said first and second remote devices~~, routing communications addressed for said first group of remote devices to said first processor within said central controller, routing communications addressed for said second group of remote devices to said second processor within said central controller and transmitting the processed communications to the addressed remote devices.

8. (Currently Amended) A method for networking a cable modem termination system with a first group of one or more cable modems operating in accordance with a proprietary protocol and a second group of one or more cable modems operating in accordance with a DOCSIS protocol, comprising:

assigning one or more time slots on the same upstream channel during which said first group and second group of cable modems may transmit information to said cable modem termination system;

identifying transmissions from said first group and second group of cable modems based on said time slot assignments;

routing transmissions from said first group of cable modems to a first processor that operates in accordance with said proprietary protocol within said cable modem termination system; and

routing transmissions from said second group of cable modems to a second processor that operates in accordance with the DOCSIS protocol within said cable modem termination system.

9. (Currently Amended) The method of claim 8 further comprising embedding a first identifier in transmissions from said first group of cable modems and embedding a second identifier in transmissions from said second group of cable modems, wherein transmissions from said first group and second group of cable modems are identified in accordance with said first and second identifiers.

10. (Currently Amended) The method of claim 9 wherein said transmissions from said first and second groups of cable modems comprise bandwidth requests transmitted in a request contention area.

11. (Currently Amended) The method of claim 10 further comprising transmitting bandwidth grants to said first and second groups of cable modems in response to said requests for bandwidth.

12. (Canceled)

13. (Original) The method of claim 8 further comprising creating a first multicast group comprising said first group of cable modems, creating a second multicast group comprising said second group of cable modems and transmitting group messages from said cable modem termination system to said first group and second group of cable modems in accordance with said first and second multicast groups.

14. (Currently Amended) The method of claim 8 further comprising receiving communications addressed for said first group and second group of cable modems ~~in accordance with addresses of said first group and second group of cable modems~~, routing communications addressed for said first group of cable modems to said first processor within said cable modem termination system, routing communications addressed for said second group of cable modems to said second processor within said cable modem termination system and transmitting the processed communications to the addressed cable modems.

15. (Currently Amended) A two way communication system comprising:
~~a plurality of remote devices wherein~~ a first group of one or more remote devices
that communicate with a local host in accordance with a first protocol[[,]]; and
a second group of one or more remote devices that communicate with said local
host in accordance with a second protocol,
wherein said local host assigns one or more time slots on the same upstream
channel during which said first and second groups of remote devices may transmit
information to said local host,
wherein said local host comprises a protocol processor for identifying
transmissions from said first and second groups of remote devices based on said time slot
assignments, and
wherein said protocol processor routes transmissions from said first group of
remote devices to a first processor operating in accordance with the first protocol and
wherein said protocol processor routes transmissions from said second group of remote
devices to a second processor operating in accordance with the second protocol.

16. (Currently Amended) The two way communication system of claim 15
wherein said local host further comprises a central processor for scheduling
transmissions from said first and second groups of remote devices.

17. (Currently Amended) The two way communication system of claim 15
wherein said local host further comprises an upstream demodulator for receiving

transmissions from said first and second groups of remote devices and a downstream modulator for transmitting information to said first and second groups of remote devices.

18. (Currently Amended) The two way communication system of claim 17 wherein each of said remote devices comprises a downstream demodulator for receiving transmissions from said local host and an upstream modulator for transmitting information to said local host.

19. (Currently Amended) The two way communication system of claim 18 wherein each of said remote devices further comprises a media access controller for embedding service identifiers in each upstream bandwidth request, wherein said media access controller embeds a first service identifier for remote devices that operate in accordance with said first protocol and a second service identifier for remote devices that operate in accordance with said second protocol.

20. (Currently Amended) A cable television system, comprising:
a plurality of cable modems wherein a first group of one or more cable modems that communicate with a cable modem termination system in accordance with a proprietary protocol; and

a second group of one or more cable modems that communicate with said cable modem termination system in accordance with a DOCSIS protocol,

wherein said cable modem termination system assigns one or more time slots on the same upstream channel during which said first and second groups of cable modems may transmit information to said cable modem termination system.

wherein said cable modem termination system comprises a protocol processor for identifying transmissions from said first and second groups of cable modems based on said time slot assignments, and

wherein said protocol processor routes transmissions from said first group of cable modems to a first processor operating in accordance with the proprietary protocol and wherein said protocol processor routes transmissions from said second group of cable modems to a second processor operating in accordance with the DOCSIS protocol.

21. (Original) The cable television system of claim 20 wherein said transmissions from said first and second groups of cable modems comprise bandwidth requests transmitted in a request contention area.

22. (Currently Amended) The cable television system of claim 21 wherein said cable modem termination system further comprises a central processor for scheduling transmissions from said first and second groups of cable modems in response to said bandwidth requests.

23. (Currently Amended) The cable television system of claim 20 wherein said cable modem termination system further comprises an upstream demodulator for receiving transmissions from said first and second groups of cable modems and a downstream modulator for transmitting information to said first and second groups of cable modems.

24. (Currently Amended) The cable television system of claim 23 wherein each of said cable modems comprises a downstream demodulator for receiving transmissions from said cable modem termination system and an upstream modulator for transmitting information to said cable modem termination system.

25. (Currently Amended) The cable television system of claim 24 wherein each of said cable modems further comprises a media access controller for embedding service identifiers in each upstream bandwidth request, wherein said media access controller embeds a first service identifier for cable modems that operate in accordance with said proprietary protocol and a second service identifier for cable modems that operate in accordance with said DOCSIS protocol.